c.) **Amendments to the Claims.**

Please amend claims 1, 5, 14, 16, 41, 43, 44 and 49, and add new claims 51-54, all without prejudice or disclaimer of the subject matter thereof.

Claim 1. (currently amended) A composition comprising:

a biomass containing a lipid component, wherein the biomass is obtained from ~~an unextracted~~ a suspension of one or more marine microorganisms selected from the group consisting of microalgae, macroalgae, marine fungi, cyanobacteria, and marine bacteria, and wherein:

the biomass is in a form of microparticles or nanoparticles; and

the microparticles or nanoparticles of the biomass contain a pharmaceutical or cosmetic activity and said activity is non-bactericidal.

Claim 2. (previously presented) The composition of claim 1, wherein said microparticles or nanoparticles have a mean diameter of 10 nm - 10 μm.

Claim 3. (previously presented) The composition of claim 1, further comprising one or more additional pharmaceutically or cosmetically active substances.

Claim 4. (previously presented) The composition of claim 3, wherein the one or more additional pharmaceutically or cosmetically active substances are selected from the group consisting of mineral substances, radical scavengers, dietary supplements, and vitamins.

Claim 5. (currently amended) The composition of claim 3, wherein the ~~unextracted~~ biomass and the one or more additional pharmaceutically or cosmetically active substances are heated to ~~the~~ a temperature at or above the melting temperature of the lipid component and mixed.

Claim 6. (previously presented) The composition of claim 3, wherein said one or more active substances are selected from the group consisting of xanthones, xanthone derivatives, ubiquinones with a chain length of form 1 to 15, inorganic thiocyanates, hydrothiocyanates of organic bases, trihydroxybenzaldehyde, trihydroxybenzaldehyde derivatives, DNA, norlichexanthone, dispersion-stabilizing substances, and combinations thereof.

Claim 7. (previously presented) The composition of claim 1, wherein:

the biomass is heated to a temperature at or above the melting temperature of the lipid component and, prior to homogenization, mixed with an aqueous solution of an emulsifying agent at about the same temperature; or

the biomass is mixed with a solvent at room temperature to form a suspension and the solvent is removed prior to homogenization; or

the biomass is mixed with a solvent and an aqueous solution of an emulsifying agent at room temperature, and the solvent is removed after homogenization.

Claim 8. (previously presented) The composition of claim 1, further comprising one or more dispersion-stabilizing substances.

Claim 9. (previously presented) The composition of claim 1, wherein the biomass comprises:

microalgae or macroalgae selected from the group consisting of the genera Asparagopsis, Cystoseira, Codium, Dictyota, Dictyopteris, Enteromorpha, Fucus, Gelidium, Gracilaria, Gracilariopsis, Halopteris, Hypoglossum, Laurencia, Plocamium, Polyneura, Sargassum, Solieria, Ulva, Thraustochytrids, Schizochytrium, Thraustochytrids, and Thraustochytrium; or

cyanobacteria selected from the group consisting of the classes Oscillatoriales, Nostocales, Chroococcales, and Stigonematales; or

marine bacteria selected from the group consisting of the genera Photobacterium, Shewanella, and Colwellia.

Claim 10. (previously presented) The composition of claim 1, wherein the pharmaceutical or cosmetic activity of the microparticles or nanoparticles of the biomass include preventing binding of pathogenic microorganisms to a surface.

Claim 11. (previously presented) A method for producing a pharmaceutical composition comprising:

cultivating a marine microorganism selected from the group consisting of microalgae, macroalgae, marine fungi, cyanobacteria, marine bacteria, and combinations thereof;

forming a suspension of the cultivated marine microorganism that contains a lipid component; and

homogenizing the suspension to form particles with a mean diameter of 10 nm - 10 μm wherein the particles contain a pharmaceutical activity and said activity is non-bactericidal.

Claim 12. (previously presented) The method of claim 11, wherein said homogenizing comprises subjecting the suspension to one or more high-pressure homogenization cycles.

Claim 13. (previously presented) The method of claim 11, further comprising adding one or more active substances to the suspension.

Claim 14. (currently amended) The method of claim 11, further comprising spray-drying or lyophilizing the particles with an aqueous surfactant solution ~~to form a dispersion~~.

Claim 15. (previously presented) The method of claim 11, further comprising:

heating the suspension to a temperature at or above the melting temperature of the lipid component prior to homogenization; or

forming an emulsion of water and said suspension followed by dissolving the emulsion in an organic solvent to obtain a dissolved emulsion, adding a water-soluble co-surfactant to said dissolved emulsion to form a modified dissolved emulsion, and pre-dispersing said modified dissolved emulsion to form a pre-dispersion, wherein homogenization comprises conducting high pressure homogenization on said pre-dispersion to form homogenized product and removing the solvent.

Claim 16. (currently amended) A method of using biomasses of ~~unextracted~~ lipid-containing microalgae, macroalgae, marine fungi, cyanobacteria, or marine bacteria as a carrier for active substances, comprising adding said active substances to said biomasses.

Claim 17. (previously presented) A method of using the composition according to claim 1 as a pharmaceutically or cosmetically active agent, comprising applying said composition as a pharmaceutical or cosmetic, wherein a pharmaceutical or a cosmetic agent is added to the particles.

Claim 18. (previously presented) A method of using the composition according to claim 1 as a foodstuff additive, the method comprising adding said composition to a foodstuff.

Claim 19. (previously presented) A method of using the composition according to claim 1 for the production of cosmetics or pharmaceuticals or foodstuffs, the method comprising mixing said composition with cosmetics, pharmaceuticals, or foodstuffs.

Claim 20. (cancelled).

Claim 21. (previously presented) A method of using the composition according to claim 1 for gene transfer, comprising mixing genes for transfer with said particles.

Claim 22. (previously presented) A method of using the composition according to claim 1 for preventing binding of nosocomially important air-spread germs to receptors on skin or tissues or for preventing growth of said germs on the skin or tissues comprising applying said composition to the skin or tissues.

Claim 23. (previously presented) A method of using the composition according to claim 1 for the improvement of the natural barrier function of the skin or for modifying the skin milieu, comprising applying said composition to skin.

Claim 24. (previously presented) A method of using the composition according to claim 1 for the prophylaxis of nosocomial infections, comprising applying said composition to regions vulnerable to nosocomial infections.

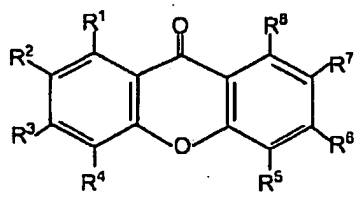
Claim 25. (previously presented) A method of using the composition according to claim 1 for inhibiting multiresistant *Staphylococcus aureus* strains, comprising applying said

composition to skin or tissues vulnerable to multiresistant *Staphylococcus aureus* strains or exposing multiresistant *Staphylococcus aureus* strains to said composition.

Claim 26. (previously presented) A method of using the composition according to claim 1 for cleaning up skin being contaminated with MRSA, comprising applying said composition to skin contaminated with MRSA.

Claim 27. (previously presented) A method of using the composition according to claim 1 for skin care after decolonization by means of bactericidal agents, comprising applying said composition to skin which has been subjected to bactericidal agents that have effected decolonization of bacteria on said skin.

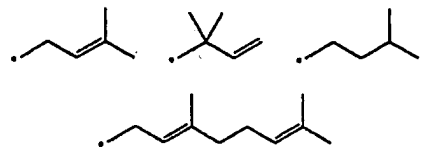
Claim 28. (previously presented) A method of using the composition according to claim 1 comprising applying said composition to skin or tissues wherein said particles further comprise xanthone derivatives of the formula



wherein R^1 - R^8 are selected from the substituents listed in table 1 below:

TABLE 1

H, OH, OMe, OAc



Me, Ac, CH_2OH, CHO, CF_3, COOH, COOMe, CN, $CONH_2$, Cl, F, NO_2, NH_2, NHAc, NMe_2

Claim 29. (previously presented) A method of using the composition according to claim 1, comprising applying said composition to skin or tissue, wherein said particles further comprise a vitamin.

Claim 30. (previously presented) The method of claim 16, wherein said active substances comprise antibiotics.

Claim 31. (previously presented) A method of using the composition according to claim 1 comprising applying said composition to obtain a dosed release of antimicrobial active substances contained in said particles and to obtain simultaneous immunostimulation.

Claim 32. (previously presented) A method of using the composition according to claim 1, comprising applying said composition to areas adjacent an implant so as to provide slow-release of active ingredients and prevent implant-associated infections.

Claim 33. (previously presented) A method of using the composition according to claim 1, comprising applying said composition so as to stimulate leucocytes or so as to activate the reticuloendothelial system.

Claim 34. (previously presented) A method of using the composition according to claim 1, wherein impregnated into textile materials or materials produced on a cellulose basis or as covering materials for wound treatment.

Claim 35. (previously presented) The composition according to claim 1, wherein said microparticles or nanoparticles are in a form of oils, sprays or ointments.

Claim 36. (previously presented) A method of using the composition according to claim 1, comprising applying said composition so as to obtain acceleration of cell growth.

Claim 37. (previously presented) A method of using the composition according to claim 1, comprising applying said composition so as to effect the goal-directed substitution of deficiency syndromes.

Claim 38. (previously presented) The composition of claim 1, wherein said biomasses are biomasses of lipid-containing microalgae, macroalgae, cyanobacteria, or marine bacteria.

Claim 39. (previously presented) The composition of claim 1, wherein said biomasses are biomasses of lipid-containing microalgae, macroalgae, or marine bacteria.

Claim 40. (previously presented) The composition of claim 4, wherein said one or more mineral substances or radical scavengers or dietary supplements or vitamins comprises vitamin C.

Claim 41. (currently amended) The composition of claim ~~5~~ 4, wherein said ~~one or more clay minerals phyllosilicates comprises~~ mineral substances comprise bentonite with a diameter < 2 µm.

Claim 42. (previously presented) The composition of claim 9, wherein

a) said cyanobacteria from the class Oscillatoriales comprises at least one strain selected from the group consisting of: SPH 03, SPH 04, SPH 05, SPH 06, SPH 09, SPH 10, SPH 11, SPH 12, SPH 13, SPH 14, SPH 20, SPH 21, SPH 22, SPH 23, SPH 25, SPH 26, SPH 29, SPH 32, SPH 34, and SPH 37 or

b) said cyanobacteria from the class Nostocales comprises at least one strain selected from the group consisting of: SPH 18, SPH 20, SPH 27, SPH 28, and SPH 38 or

c) said cyanobacteria from the class Chroococcales comprises at least one strain selected from the group consisting of: SPH 07a, SPH 07b, SPH 08, SPH 14, SPH 16, SPH 17, SPH 24, SPH 33, SPH 36, SPH 39, SPH 40, and SPH 43.

Claim 43. (currently amended) The composition of claim ~~10~~ 11, wherein said ~~lipid-containing~~ microalgae, macroalgae, marine fungi, cyanobacteria, or marine bacteria are cultivated in the presence of clay minerals.

Claim 44. (currently amended) The composition of claim ~~6~~ 3, wherein said one or more additional pharmaceutically or cosmetically active substances comprise inorganic thiocyanates or hydrothiocyanates of organic bases or trihydroxybenzaldehyde, or its derivatives or DNA.

Claim 45. (previously presented) The method of claim 25, wherein said multiresistant *Staphylococcus aureus* strains comprise strains of methicilline-resistant strains of *Staphylococcus aureus*.

Claim 46. (previously presented) The method of claim 29, wherein said vitamin is vitamin C.

Claim 47. (previously presented) The method of claim 13, wherein heating of the microalgae, macroalgae, marine fungi, cyanobacteria, or marine bacteria and of the surfactant-water mixture does not take place.

Claim 48. (previously presented) The composition of claim 9, wherein

a) said cyanobacteria from the class Oscillatoriales comprises at least one strain selected from the group consisting of: SPH 04, SPH 05, SPH 06, SPH 09, SPH 10, SPH 11, SPH 12, SPH 13, SPH 14, SPH 20, SPH 21, SPH 23, SPH 25, SPH 26, SPH 29, SPH 32, SPH 34, and SPH 37 or

b) said cyanobacteria from the class Nostocales comprises at least one strain selected from the group consisting of: SPH 18, SPH 20, SPH 27, SPH 28, and SPH 38 or

c) said cyanobacteria from the class Chroococcales comprises at least one strain selected from the group consisting of: SPH 07a, SPH 07b, SPH 08, SPH 14, SPH 16, SPH 17, SPH 24, SPH 33, SPH 36, SPH 39, SPH 40, and SPH 43.

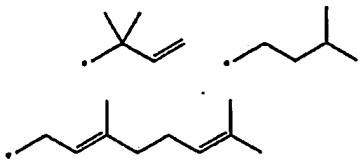
Claim 49. (currently amended) The composition of claim ~~9~~ 11, wherein said microalgae, macroalgae, marine fungi, cyanobacteria, or marine bacteria comprise cyanobacteria from the class Stigonematales or macroalgae from the genera Asparagopsis, Cystoseira, Codium, Dictyota, Dictyopteris, Enteromorpha, Fucus, Gelidium, Gracilaria, Gracilariopsis,

Halopteris, Hypoglossum, Laurencia, Plocamium, Polyneura, Sargassum, Solieria, or Ulva or hraustochytrids from the genera Schizochytrium or Thraustochytrium or Marine bacteria from the genera Photobacterium, Shewanella or Colwellia.

Claim 50. (previously presented) The method of claim 28, wherein R^1-R^8 is selected from the substituents listed in table 1 below:

TABLE 1

H, OH, OMe, OAc



Me, Ac, CH_2OH, CHO, CF_3, COOH, COOMe, CN, $CONH_2$
Cl, F, NO_2, NH_2, NHAc, NMe_2

Claim 51. (new) A composition comprising:

a biomass containing a lipid component, wherein the biomass is obtained from a suspension of biological material identified as Accession No. _____, and wherein:

the biomass is in a form of microparticles or nanoparticles; and

the microparticles or nanoparticles of the biomass contain a pharmaceutical or cosmetic activity and said activity is non-bactericidal.

Claim 52. (new) A method for producing a pharmaceutical composition comprising:

cultivating a marine microorganism of Accession No. _____;

forming a suspension of the cultivated marine microorganism that contains a lipid component; and

homogenizing the suspension to form particles with a mean diameter of 10 nm - 10 μm wherein the particles contain a pharmaceutical activity and said activity is non-bactericidal.

Claim 53. (new) A method of using biomasses of lipid-containing microorganisms of Accession No. _____ as a carrier for active substances, comprising adding said active substances to said biomasses.

Claim 54. (new) A composition comprising microorganisms of Accession No. _____.